

REMARKS

Claims 71-73, 77-81 and 83-95 are pending. The amendments to claims 71, 90, 91 and 95, are supported by the disclosure on page 11 of the specification, which states that synthetic analogs or mimetics of P-selectin ligand are operable in the present invention. The synthetic ligand analogs or mimetics resemble the carbohydrate ligand for P-selectin in shape and/or charge distribution, and compete with the cognate cellular ligand for the binding site on P-selectin.

In the Official Action of February 10, 2004, made final, claims 71-73, 77-81 and 83-90 were rejected under 35 U.S.C. § 102(e) as being anticipated by Cummings et al., (U.S. Patent No. 5,464,778). Claims 71-73, 77-81 and 83-90 have also been rejected under 35 U.S.C. §103(a) as being obvious over Cummings et al., in view of Larsen et al., (U.S. Patent No. 5,840,679). These grounds of rejection are traversed.

Cummings et al., states that the glycoprotein ligand for P-selectin, or antibodies or fragments thereof, can be used as inhibitors of P-selectin binding to cells. The Cummings et al., patent discusses atherosclerosis in a section of the patent labeled "Clinical Applications". In that section, the patent states that the glycoprotein ligand can be used to treat inflammatory responses resulting from conditions such as ischemia, sepsis, intravascular coagulation, adult respiratory syndrome, tumor metastasis, rheumatoid arthritis, and atherosclerosis. Thus, rather than describing the treatment of the underlying disease of atherosclerosis, the reference simply teaches the treatment of potentially inflammatory conditions that may result from atherosclerosis. See col. 18, lines 54-62 of the reference. See, also, col. 19, line 64-col. 20, line 5, of the reference which states that the glycoprotein ligand can be used to treat inflammatory conditions, such as thrombus formation and ischemia, resulting from the rupture of a fully developed atherosclerotic plaque. This teaching is directed to treating the effects of the disease, rather than the treatment of the disease itself.

In contrast to Cummings et al., the present invention is directed to the treatment of atherosclerosis by decreasing the formation or growth of atherosclerotic lesions. This treatment requires the long term administration of a drug for treating a chronic build up of lesions and plaque in arteries. This method is distinguished from the reference Cummings et al., which relates to the treatment of acute inflammatory conditions, such as thrombosis, which may result from atherosclerosis. The claims of this application have now been amended to state that the

treatment of atherosclerosis entails a decrease in the formation or growth of lesions on arterial walls. Antecedent support for this amendment is found in claim 91. The Cummings et al., reference does not disclose the treatment of atherosclerosis or the prevent of lesion formation.

Applicants also contend that the declaration under 37 CFR 1.131 is effective in overcoming the Cummings et al., reference by antedating that reference. The declaration shows that, prior to the effective date of the reference (the earliest filing date), applicants had discovered that the binding of P-selectin and a ligand of P-selectin is a contributing factor in the development of atherosclerosis lesions. As a result of that discovery, applicants deduced that inhibitors of P-selectin could be used to treat atherosclerosis in mammals based on the role of P-selectin and/or E-selectin on the pathogenesis of atherosclerosis as claimed in the present application.

The Examiner states that the Wagner declaration fails to establish that applicants had possession of the invention recited in the claims now recited in this application. Applicants maintain that the original claims covered a genus of agents which could be used to practice the invention, and the genus included several species including PSGL-1. The original claims were limited by the Examiner to particular species of the genus as a result of an election of species and/or restriction requirement. Notwithstanding, applicants' position remains that possession of the genus is sufficient to constitute possession of the species. The alternative result would require applicants to demonstrate possession of each and every species delineated in the restriction requirement and this is unrealistic and contrary to the case law. See *In re Schaub*, 190 USPQ 324 (CCPA 1976).

Accordingly, applicants again submit that the Wagner declaration is adequate and sufficient to antedate the Cummings et al., reference since the declaration shows that applicants were in possession of the genus which included the species of Cummings et al.

The Larsen et al., reference has apparently been cited for disclosing the use of P-selectin ligand glycoprotein in combination with other therapeutic agents for the treatment of various inflammatory conditions. It is significant to note that Larsen et al., like Cummings et al., does not relate to the treatment of chronic conditions, such as atherosclerosis, but is instead directed to the treatment of inflammatory or acute conditions. Moreover, neither Cummings et al., nor Larsen et al., disclose that a treatment for atherosclerosis can be administered prior to, or in conjunction with, a vessel-corrective technique, as recited in applicant's claims 91-95.

Claims 71-73, 77-81 and 83-90 also stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting, on the basis of claims 40-41, 45, 49-52, 56, 59-60 and 73-74 of co-pending application Serial no. 09/436,076, and claims 39-88 of co-pending application Serial no. 09/863,642.

Applicants reiterate that they would be prepared to file a terminal disclaimer to obviate the obviousness-type double patenting rejection should the claims otherwise be considered allowable.

In view of the foregoing facts and reasons, the present application is now believed to overcome the remaining rejections, and to be in proper condition for allowance. Accordingly, reconsideration and withdrawal of the rejections, and favorable action on this application, is solicited. Entry of the foregoing amendment is appropriate at this time since it does not create any new issues and serves to advance the prosecution of this application. The Examiner is invited to contact the undersigned at the telephone number listed below to discuss any matter pertaining to this application.

Applicant believes no fee is due with this response. However, if a fee is due, please charge Deposit Account No. 18-1945 accordingly.

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Respectfully submitted,

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